



Ginnie Mae EDI Program

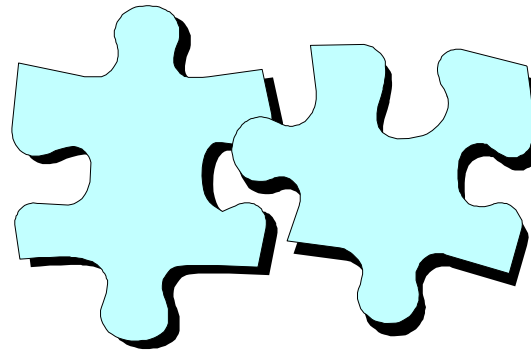
June 2000

Agenda

- ◆ Introductions
- ◆ Program Background
- ◆ EDI 101
- ◆ EDI Process
- ◆ Questions/Answers
- ◆ Program Contacts
- ◆ Conclusion

Introductions - EDI Team

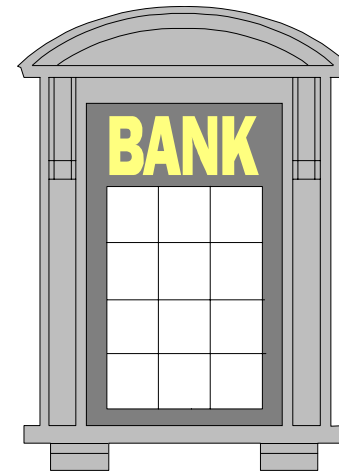
- ◆ Quarterly Reporting Manager
 - ◆ Stewart Spettel
- ◆ EDI Team Leader
 - ◆ Richard Parker
- ◆ Technical Team
 - ◆ Eric Irizarry
 - ◆ Mike Moore
 - ◆ Mark Barrett
- ◆ Help Desk
 - ◆ 888-GINNIE4
- ◆ Trading Partner Coordination
 - ◆ Monique Squalls



Ginnie Mae EDI Program Background

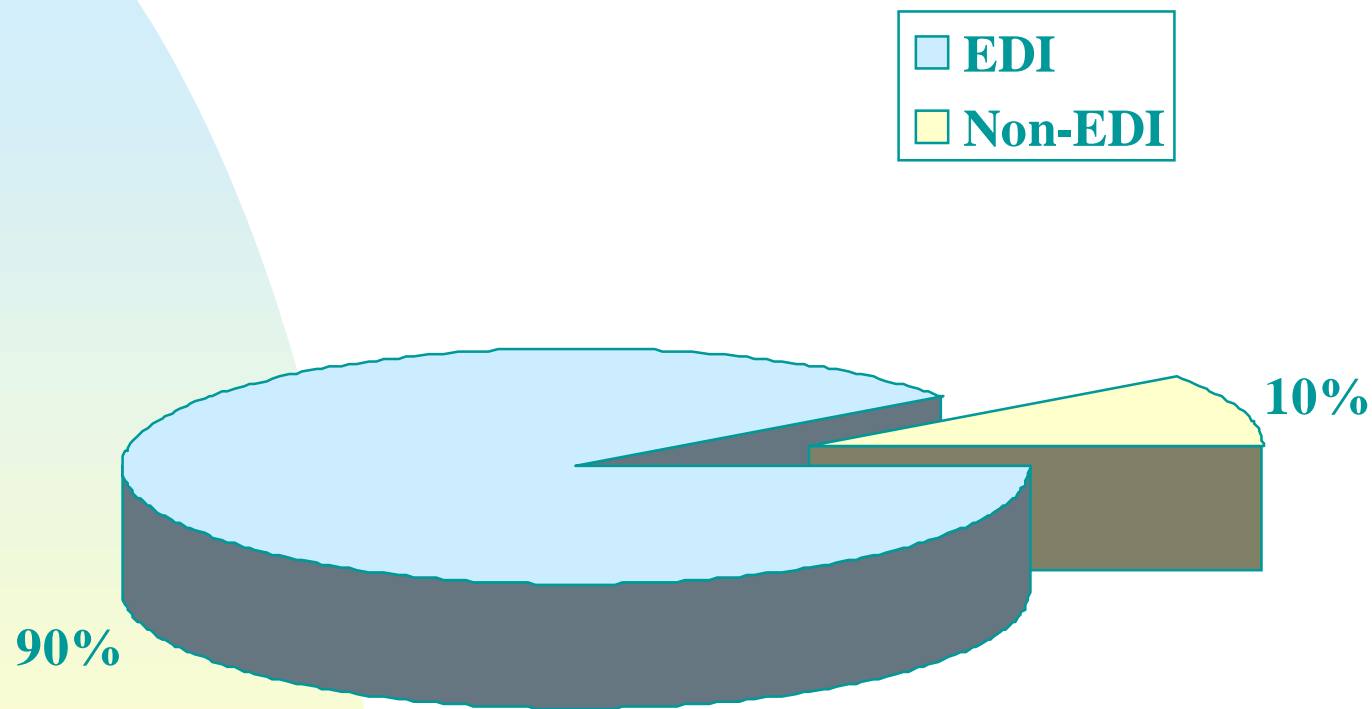
Ginnie Mae Data Facts

- ◆ Ginnie Mae's portfolio growth has resulted in increasing data volume
 - ◆ 7.4 million loans = 2 gigabytes of data
- ◆ Ginnie Mae Issuers = 400 Trading Partners
- ◆ 30 of the largest banks submit 90% of the transactions; 370 report 10%



Ginnie Mae EDI Program Background

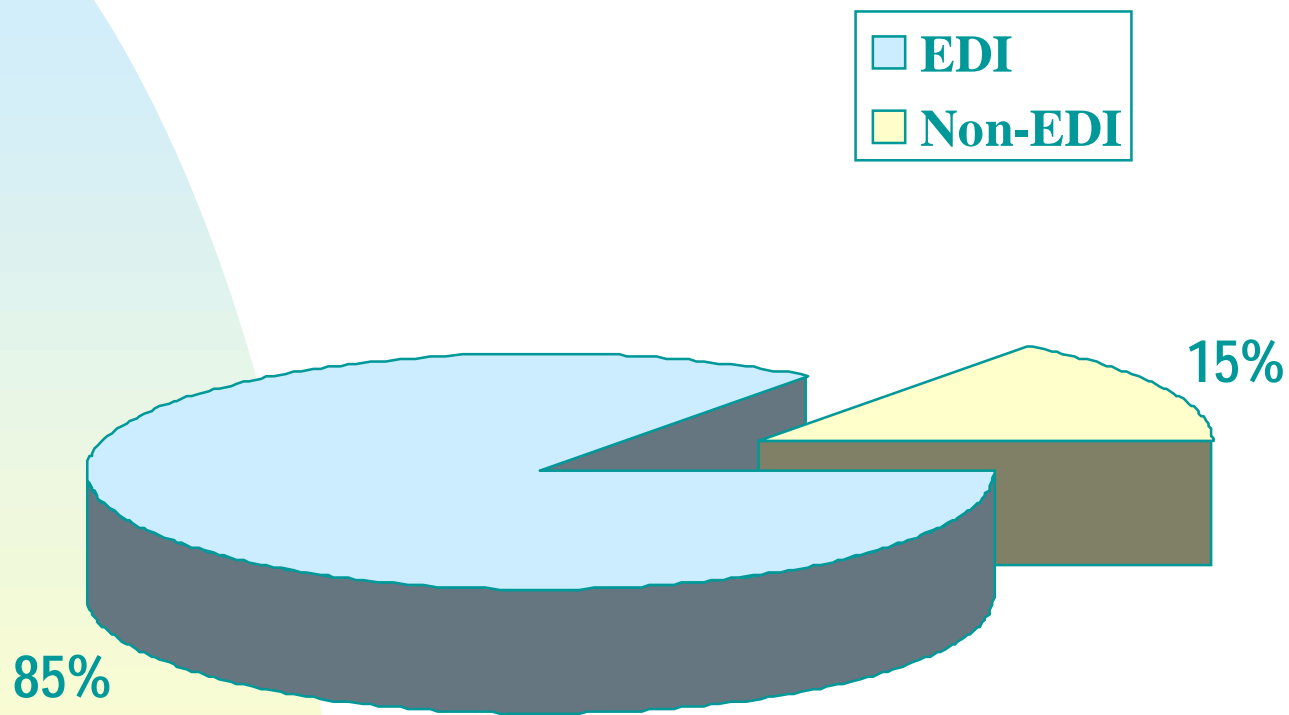
Percentage of Loans Submitted via EDI



June 2000

Ginnie Mae EDI Program Background

Percentage of Issuers Submitting via EDI



June 2000

Ginnie Mae EDI Program Background

Ginnie Mae EDI Timeline

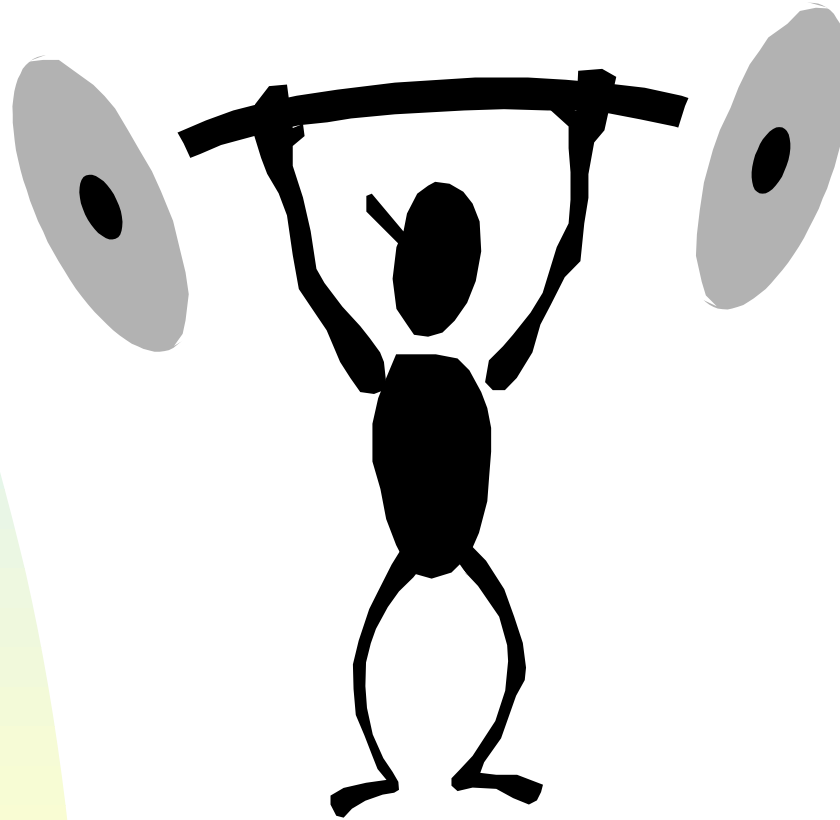
- ◆ June 1995 - Requirements Analysis
- ◆ October 1996 - Business Center Opening
- ◆ Fall 1996 - Pilot Program
- ◆ Spring 1997 - Pilot Evaluation
- ◆ June 1997 - Production
- ◆ December 1998 - EDI Implementation Completion
- ◆ April 2000 - EDI Processing 90% Ongoing

Ginnie Mae EDI Program Background

Goals of the Ginnie Mae EDI Program

- ◆ Simplify the reporting process for the Ginnie Mae issuer community
- ◆ Increase responsiveness to issuer service needs and requests
- ◆ Move toward industry-wide reporting requirement standards

Trading Partner EDI Workshops



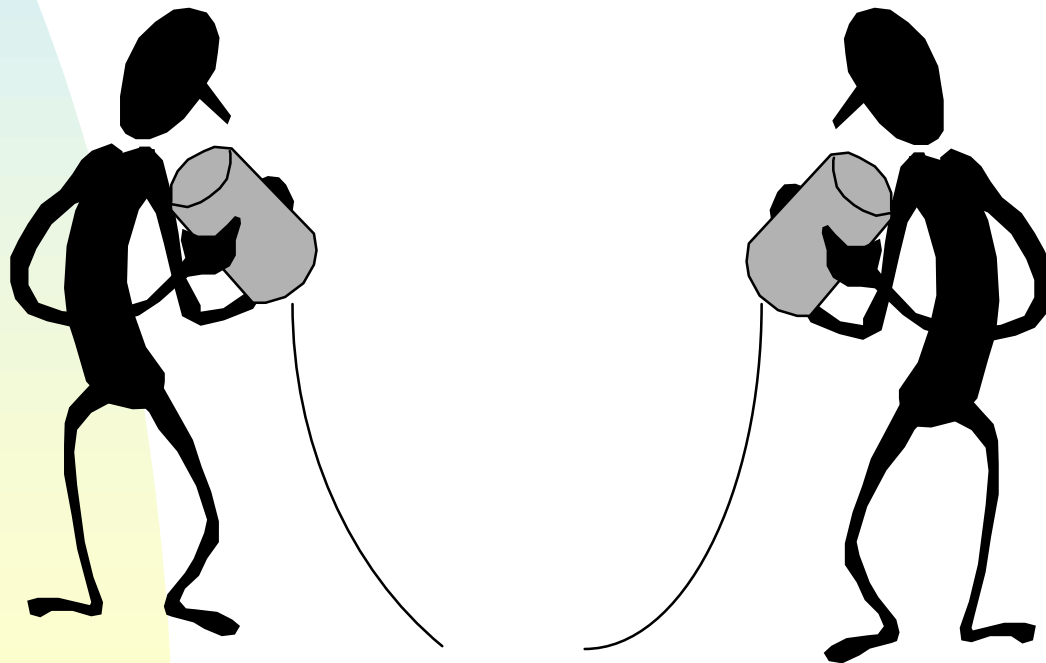
EDI 101

June 2000

EDI 101

Questions to Answer

- ◆ What is EDI?
- ◆ How does EDI work?
- ◆ Why use EDI?



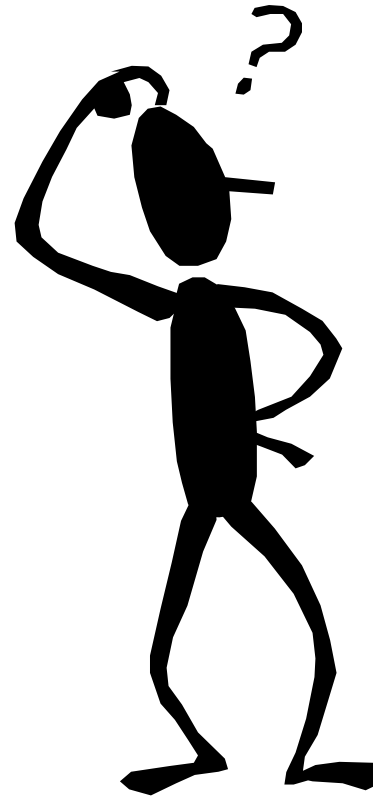
EDI 101: What is EDI?

History of EDI

- ◆ The concept and technology have been around since the late 1960's.
- ◆ EDI is being implemented throughout the mortgage banking industry and is used by Fannie Mae, Freddie Mac, and the Department of Housing and Urban Development.
- ◆ Recently EDI has caught the attention of the world.
- ◆ Is the World Wide Web the future of traditional EDI?

EDI 101: What is EDI?

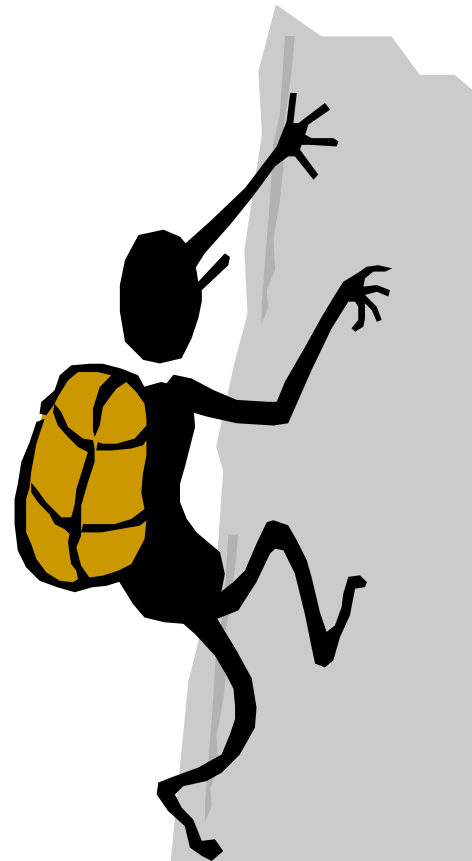
- ◆ In its simplest form, Electronic Data Interchange, or EDI, is the application-to-application exchange of standard business documents in electronic format between two companies.



EDI 101: What is EDI?

Basic Concepts

- ◆ Application-to-Application
- ◆ Machine Processable
- ◆ Business Documents
- ◆ Standards Based



EDI 101: What is EDI?

Standards

- ♦ American National Standards Institute, ANSI
- ♦ Accredited Standards Committee, ASC
- ♦ X12 - Subcommittee for EDI Transaction Sets
- ♦ Transaction Set #203 - Secondary Mortgage Market Investor Report

EDI 101: What is EDI?

Definitions

- ♦ Trading Partner - the sending and/or receiving party involved in the exchange of EDI transmissions
- ♦ Translator - Software that is used to translate EDI data to a corporate proprietary format and vice versa
- ♦ Transaction Set - The EDI term for a business document, such as an investor report, purchase order or invoice

EDI 101: What is EDI?

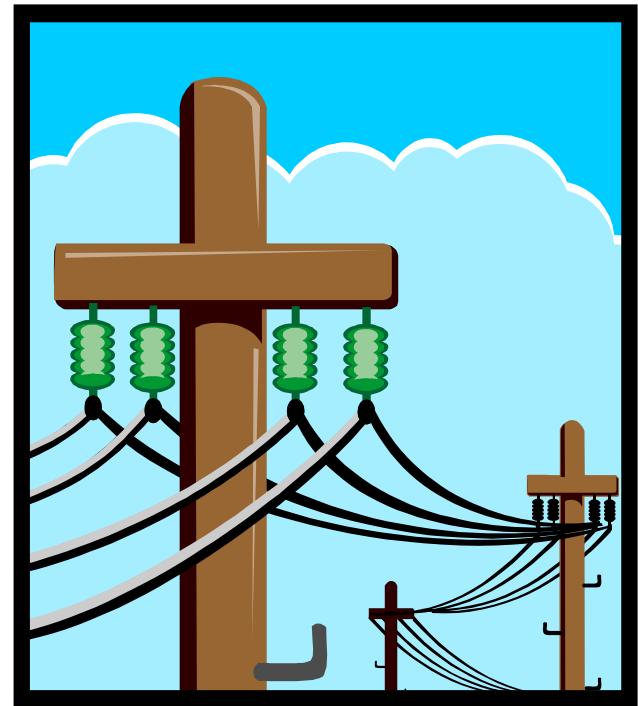
Definitions

- ♦ Standards - The definition and format of a business document's content, providing EDI-linked computers the ability to speak the same language
- ♦ Mapping - The process of identifying the standard data elements' relationship to the application data elements

EDI 101: How does EDI work?

Communications

- ♦ ISDN - Integrated Services Digital Network
- ♦ VAN - Value Added Network
- ♦ BBS - Bulletin Board System
- ♦ Web-based (maximum 600 loans)



EDI 101: How does EDI work?



Issuers



Service Bureaus

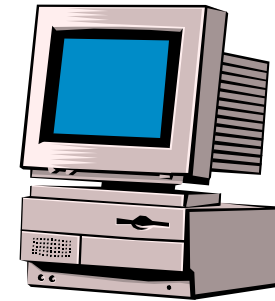


Subservicers



Telecommunications

Method

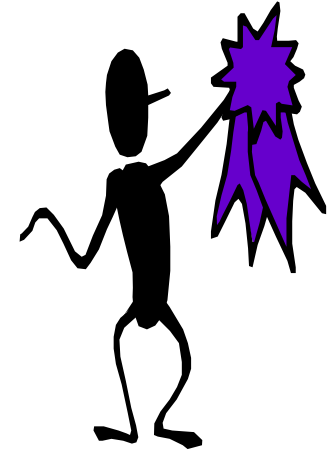


Ginnie Mae

EDI 101: Why use EDI?

Primary Benefits of EDI are the ability to:

- ◆ Submit the same EDI transaction set, utilizing agency-specific maps, to all your government trading partners
- ◆ Receive faster feedback from Ginnie Mae about the success of your loan processing submissions
- ◆ Receive information from Ginnie Mae about errors received in the next quarterly cycle in the translator system to correct before processing the data



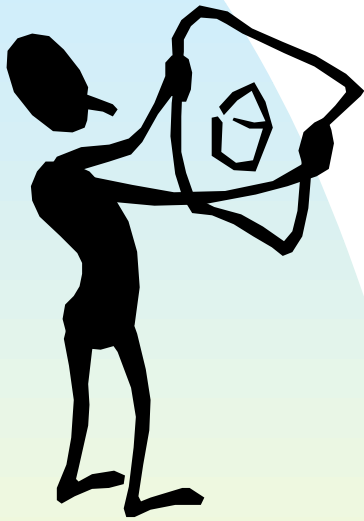
Trading Partner EDI Workshops



EDI Process

EDI Process

Six Step Process



- ♦ Step 1 - Plan Ginnie Mae Implementation
- ♦ Step 2 - Assess and Evaluate Technology
- ♦ Step 3 - Schedule Testing with Ginnie Mae
- ♦ Step 4 - Establish EDI Environment
- ♦ Step 5 - Test EDI System
- ♦ Step 6 - Move into Production

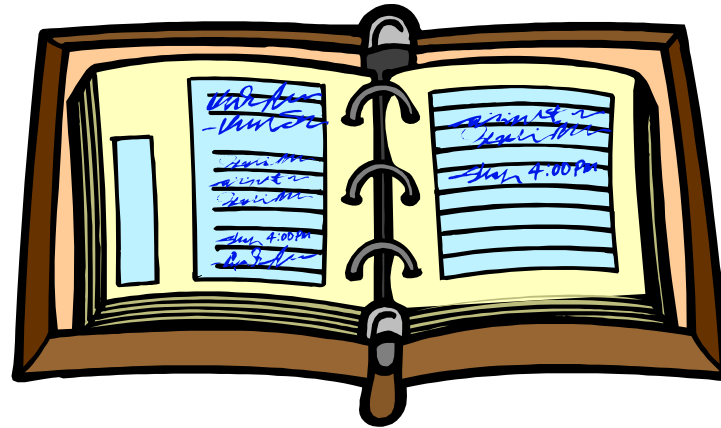
EDI Process

Step 1 Plan Ginnie Mae Implementation



Step 1 - Plan Ginnie Mae Implementation

- ♦ Plan project with management team
- ♦ Assemble team resources
- ♦ Contact ACS GSG EDI Coordinator, Monique Squalls



EDI Process

Step 2 Assess and Evaluate Technology



Step 2 - Assess and Evaluate Technology

- ♦ Evaluate current technical capabilities
- ♦ Select operating platform
- ♦ Evaluate and select translator
- ♦ Evaluate and select telecommunications solution

Step 2 - Assess and Evaluate Technology

Evaluate current technical capabilities

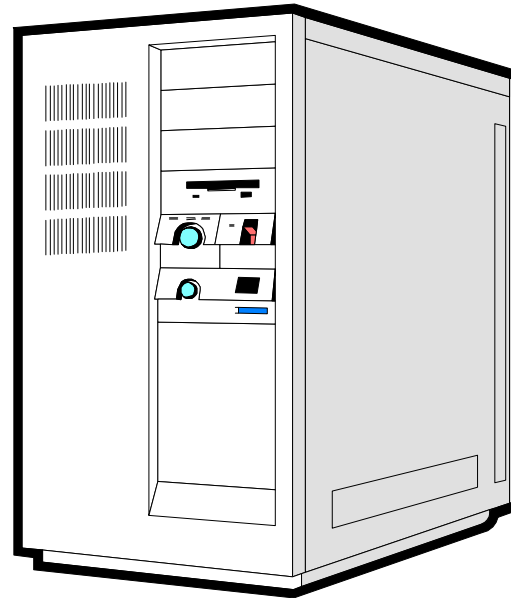
- ◆ Define and secure technical resources
- ◆ Determine resource capability



Step 2 - Assess and Evaluate Technology

Select Operating Platform

- ♦ Assess current technologies compatibility with proposed EDI architecture
- ♦ Identify platform capable of handling trading partner loan volume



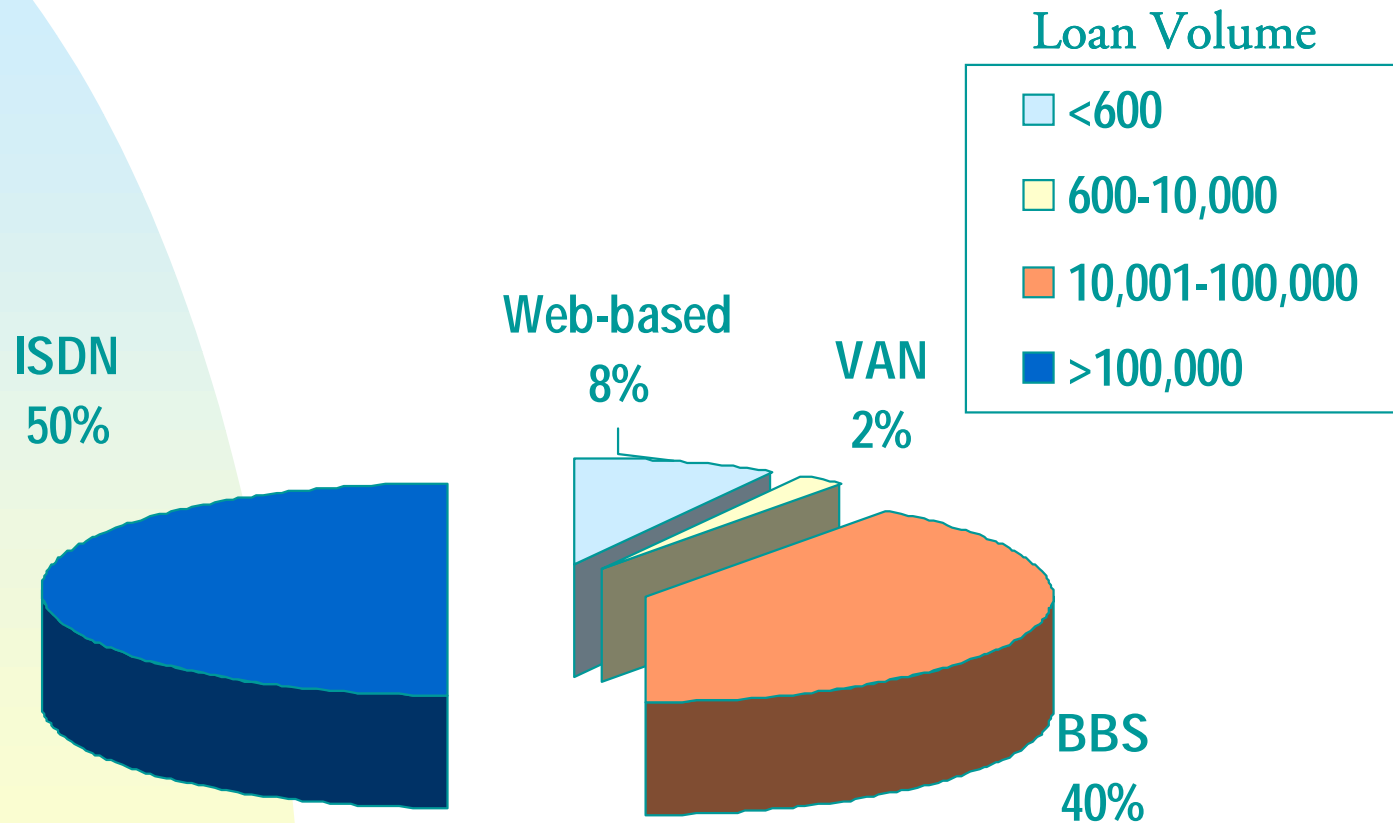
Step 2 - Assess and Evaluate Technology

Evaluate and Select Translator

- ♦ Cost
- ♦ Hardware and operating system are compliant
- ♦ Speed
- ♦ Mapping tool
- ♦ Telecommunications tool
- ♦ Data handling functions
- ♦ Flexibility for future initiatives

Step 2 - Assess and Evaluate Technology

Ginnie Mae Issuers by Loan Volume



June 2000

Step 2 - Assess and Evaluate Technology

12 Telecommunications Factors to Consider

- ♦ Transaction processing requirements
- ♦ Support issues
- ♦ Reporting and inquiry capabilities
- ♦ Communications access
- ♦ Mailbox access
- ♦ Standards support
- ♦ Data support
- ♦ Security
- ♦ Control mechanisms
- ♦ Backup and recovery
- ♦ Problem handling
- ♦ Price considerations

Step 2 - Assess and Evaluate Technology

Identification of Telecommunications Technology

- ♦ Definition
- ♦ Advantages/Disadvantages
- ♦ Features
- ♦ Technical Needs
 - ♦ Hardware
 - ♦ Software
 - ♦ Services

Step 2 - Assess and Evaluate Technology

Definition of ISDN

- ♦ Digital telephone service
- ♦ ISDN Modem to ISDN Modem connection
- ♦ Used to transfer large amounts of data

Advantages

- ♦ Ideal for high loan volume
- ♦ Relatively low operational cost for high individual loan volume
- ♦ Schedule days

Disadvantages

- ♦ Complex configuration
- ♦ High startup costs

Step 2 - Assess and Evaluate Technology

ISDN Features and Technical Needs

- ♦ Software
- ♦ Services
 - ♦ Contract with local telecommunications vendors to arrange for installation of ISDN lines

Step 2 - Assess and Evaluate Technology

Definition of a VAN - Value Added Network

- ♦ A commercial entity that provides communications services, electronic store, and forward mailboxing
- ♦ Used to alleviate expense of establishing a direct connection

Advantages

- ♦ Easy startup for Ginnie Mae and Trading Partner
- ♦ Communication flexibility
- ♦ Provides security and audit trails
- ♦ Checks for ANSI compliance

Disadvantages

- ♦ High operational cost
- ♦ Reduced data control with third party

Step 2 - Assess and Evaluate Technology

VAN Features

- ♦ VAN Interconnects
- ♦ Transaction Broadcasts
- ♦ Consulting Services
- ♦ EDI-to-Fax Services
- ♦ EDI-to-E-mail Services
- ♦ Internet Interface
- ♦ 24-Hour Help Desk
- ♦ Sorting Profile
- ♦ Data Recovery

Step 2 - Assess and Evaluate Technology

VAN Technical Needs

- ◆ Hardware
- ◆ Software
- ◆ Services
 - ◆ Contract with VAN or Service Provider
 - ◆ Harbinger
 - ◆ IBM Advantis
 - ◆ Sterling Commerce
 - ◆ Sprint
 - ◆ GE Global Exchange Services (formerly GEIS)
 - ◆ MCI

Step 2 - Assess and Evaluate Technology

Definition of a BBS

- ♦ A system designed to receive data submissions via dial-up modem lines

Advantages

- ♦ Utilizes existing technology
- ♦ Easy to configure
- ♦ Low startup costs
- ♦ Zip file capability

Disadvantages

- ♦ Slower transmission speeds
- ♦ Variable cost depending on long distance rates

Step 2 - Assess and Evaluate Technology

BBS Features and Technical Needs

- ♦ Hardware
 - ♦ Asynchronous Modem (Hayes compatible) if using Ginnie Mae Issuer Information System (IIS)
- ♦ Software
 - ♦ Communications Software

Step 2 - Assess and Evaluate Technology

Web-based EDI

- ♦ PC-based technology
- ♦ Utilizes Web browser technology
- ♦ Forms-based data entry

Advantages

- ♦ Ease of use
- ♦ Utilizes advanced technologies
- ♦ Can be accessed from almost any location with telephone connectivity

Disadvantages

- ♦ New in the EDI world
- ♦ Accommodates a maximum of 600 users
- ♦ Requires loan entry each quarter

Step 2 - Assess and Evaluate Technology

Web-based Features and Technical Needs

- ◆ Target Market
 - ◆ Low to medium loan volume Trading Partners
 - ◆ Limited technical resources
 - ◆ Limited EDI resources

EDI Process

Step 3

Schedule Testing
with Ginnie Mae



Step 3 - Schedule Testing with Ginnie Mae



- ♦ Call to schedule testing with Ginnie Mae and ACS GSG
- ♦ Submit Trading Partner Profile
- ♦ Trading Partner agreement form

EDI Process

Step 4

Establish EDI
Environment



Step 4 - Establish EDI Environment

Topics

- ◆ Purchase
- ◆ Configure Hardware/Software - Mapping
- ◆ Telecommunications
- ◆ Develop Application Interface
- ◆ Unit Test

Step 4 - Establish EDI Environment

Translation Software and Services

- ♦ Commercial-off-the-Shelf
 - ♦ Resources
 - ♦ EDI Buyers Guide (www.e-com.com/buyersguide)
 - ♦ Logistics Management Institute (LMI)
 - ♦ VANs
- ♦ Outsourcing
 - ♦ Service Bureau
 - ♦ VAN Translations

Step 4 - Establish EDI Environment

Mapping

- ◆ What is a map?
- ◆ How to create a map
- ◆ Components of transaction sets

Step 4 - Establish EDI Environment

What is a Map?

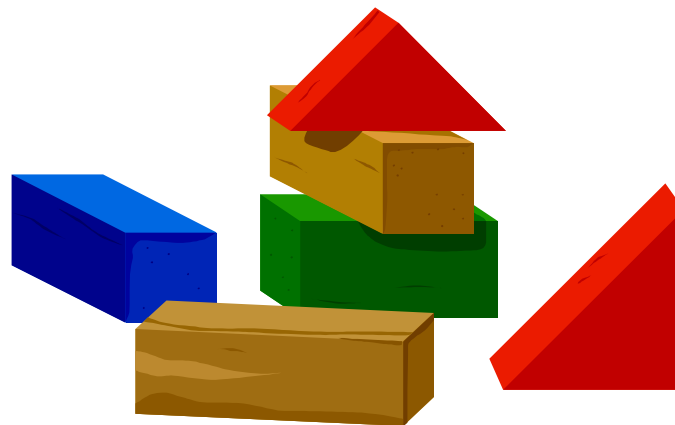
- ♦ A set of instructions given to a translator to show the translator where to get data from the proprietary format, and then put it into the standard 203 transaction set.



Step 4 - Establish EDI Environment

How to create a Map

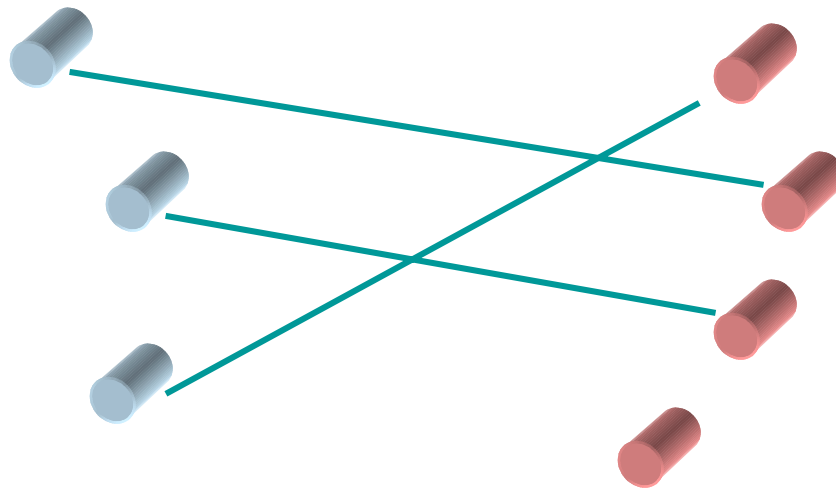
1. Gather proprietary data structure and Ginnie Mae 203 map



Step 4 - Establish EDI Environment

How to create a Map

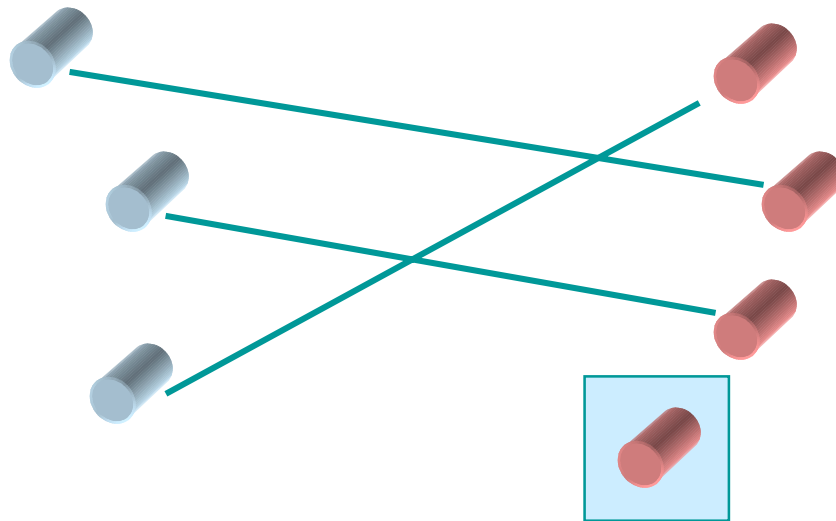
2. “Connect-the-dots” between your system and the standard



Step 4 - Establish EDI Environment

How to create a Map

3. Identify items not mapped to 203



Step 4 - Establish EDI Environment

How to create a Map

4. Identify missing data items, i.e., data items needed by 203 transaction set not currently in system
5. Plan to generate the missing data items

Step 4 - Establish EDI Environment

Components of a Map

Envelopes

contain one or more

Transaction Sets

made up of

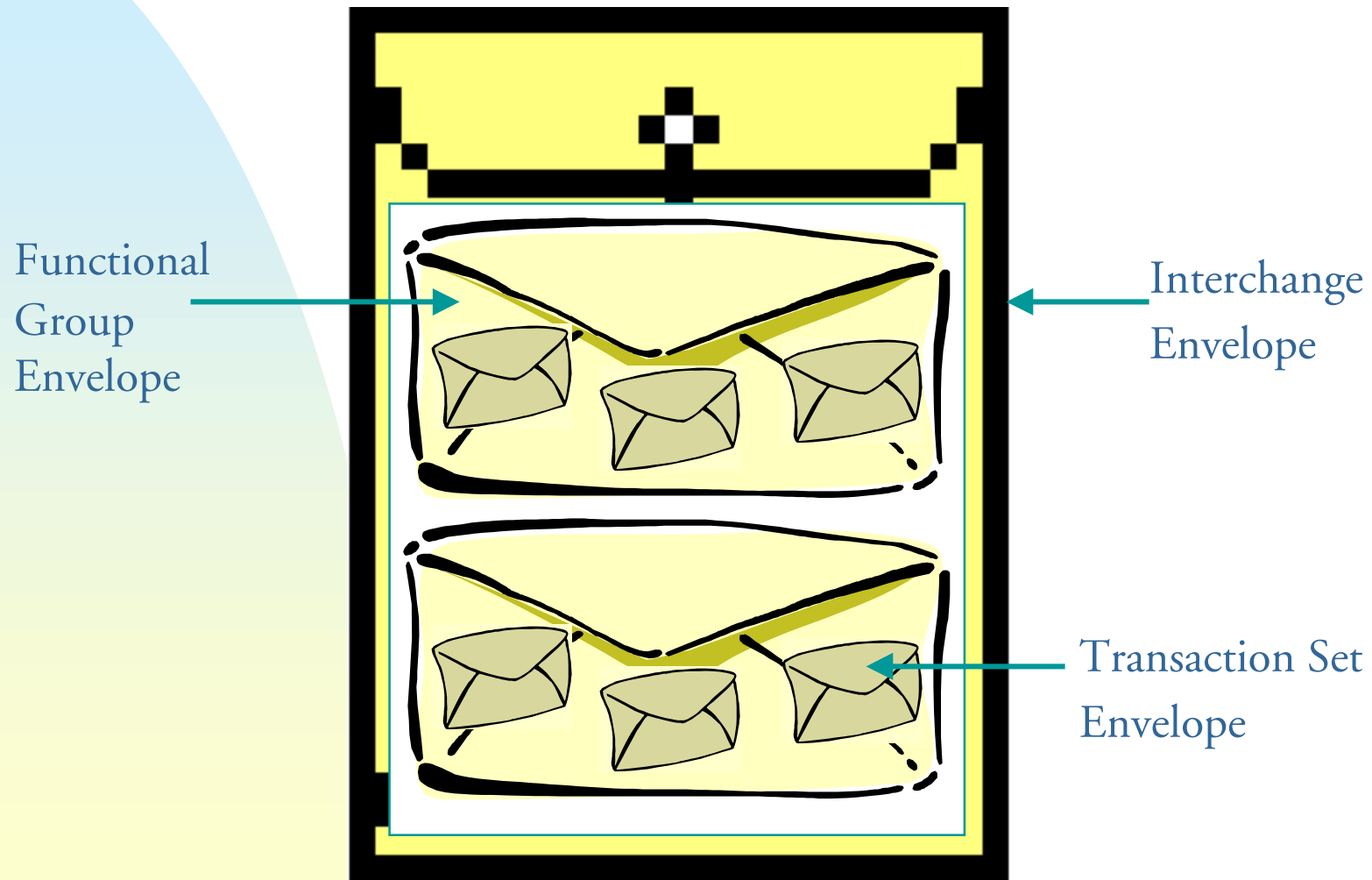
Segments

made up of

Elements

Step 4 - Establish EDI Environment

Components of a Map: Envelopes



Step 4 - Establish EDI Environment

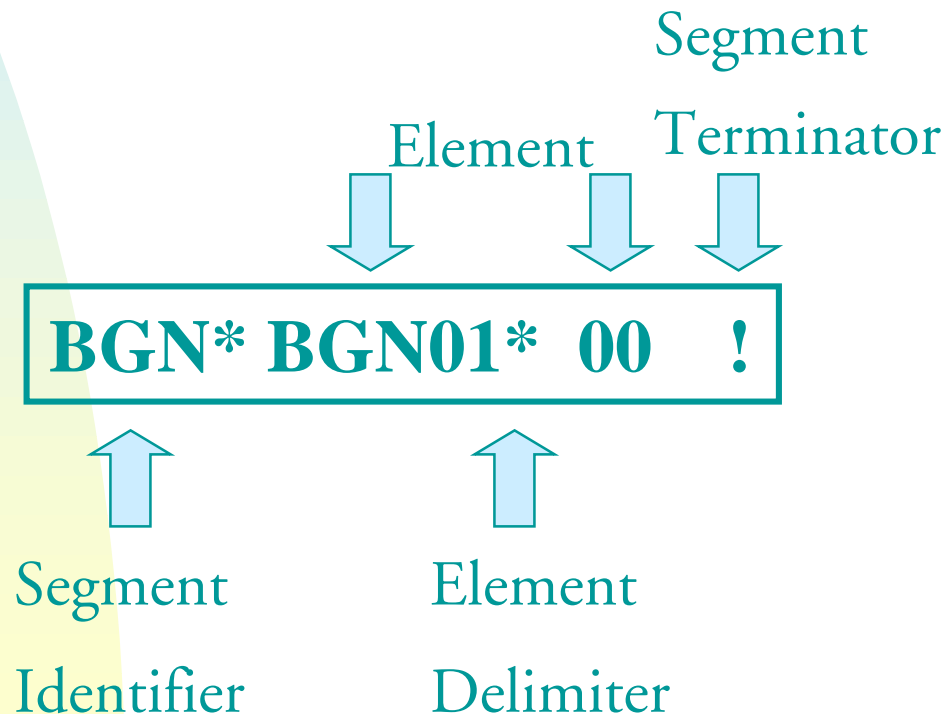
Components of a Map: Transaction Sets

- ♦ A collection of data segments that contain the information necessary to perform a standard business transaction

Step 4 - Establish EDI Environment

Components of a Map: Segments and Elements

- ♦ A combination of related data elements in a standard sequence



Step 4 - Establish EDI Environment

Loan Level Proprietary Layout (Pre-EDI)

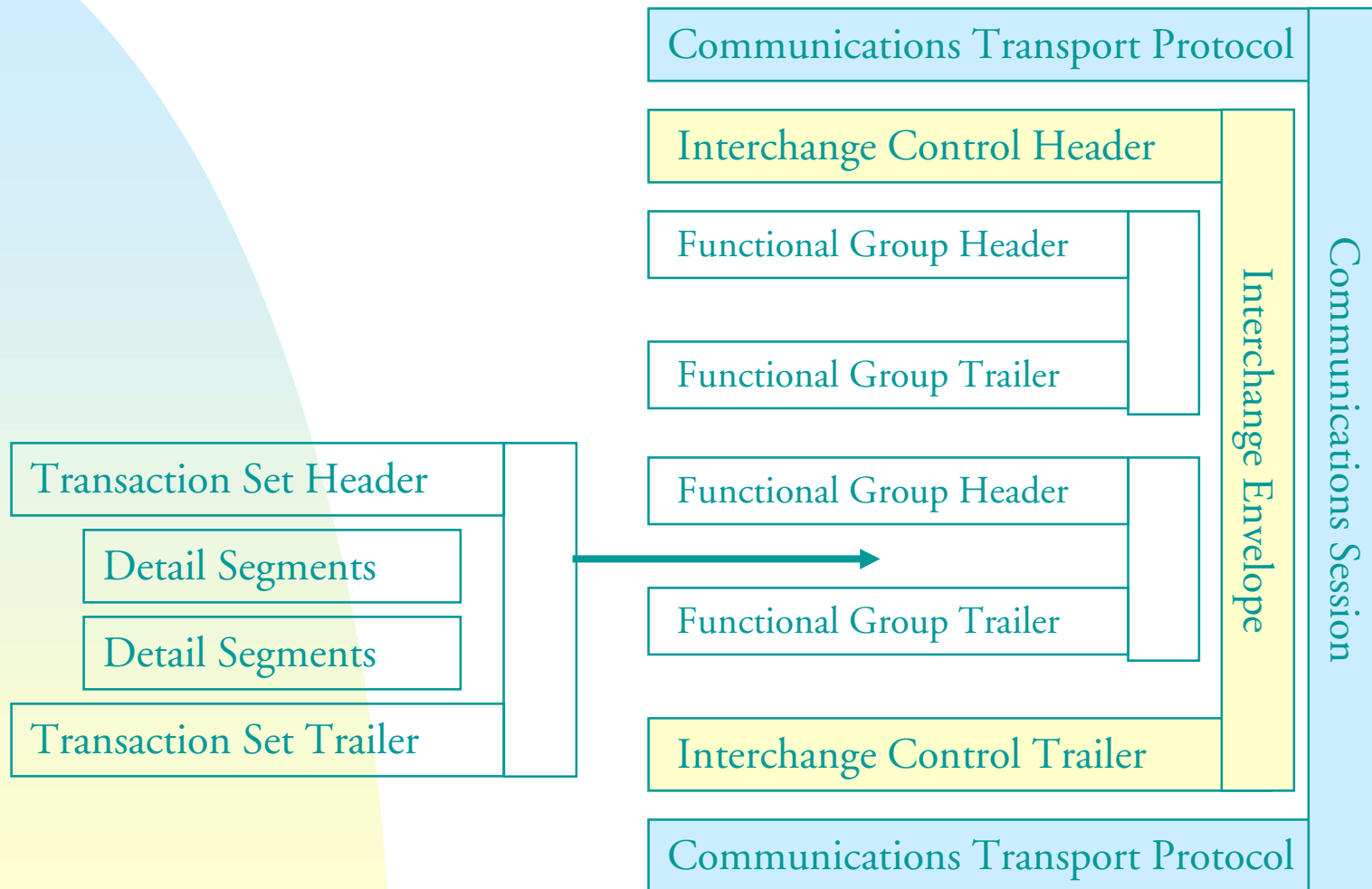
H23456	062000		
D2345602345611111	32222222	987654321	Johnson
Brad	400 Main Street	McLean	VA2203333331996100419961007
N1996140509125000000000	H00020000	N001000000000000	C000050000R
T23456			

Step 4 - Establish EDI Environment

ANSI ASC X12 203 Transaction Set

```
ISA*00*  *00*  *01*707873634  *01*808716344 *000113*135
4*U*00306*0000000060*0*T*:!
GS*MH*70783634*808716344*000113*1354*60X*003060!
ST*203*0001!
BGN*00*EDILLMBSIS*971349*1351*ET!
DTP*730*CM*200001!
REF*VI*23456!
NX2*07*McLean!
NX2*09*VA!
NX2*15*400 Main Street!
NX2*19*220333333!
N1*BW*Johnson*34*987654321!
N2*Brad!
```

Step 4 - Establish EDI Environment



Step 4 - Establish EDI Environment

Telecommunications

- ♦ Ginnie Mae EDI Transaction Flow
- ♦ Specific Telecommunication Options
 - ♦ ISDN
 - ♦ VAN
 - ♦ BBS
 - ♦ Web-based

Step 4 - Establish EDI Environment

Ginnie Mae EDI Transaction Flow



Issuer,
Service Bureau,
Subservicer



Ginnie Mae

Step 4 - Establish EDI Environment

To establish the EDI Telecommunications Environment

- ♦ Contact Ginnie Mae EDI Technical Team
- ♦ The following technical information is required of all EDI Trading Partners:
 - ♦ Company Name, Address, and DUNS Number, Issuer Number
 - ♦ EDI Coordinator Name
 - ♦ EDI Telecommunications Contact
 - ♦ EDI Translation Contact
 - ♦ Service Bureau Information (if applicable)
 - ♦ Translation Software Name

Step 4 - Establish EDI Environment

To establish EDI Telecommunications Environment using ISDN:

- ♦ The following information is required of Trading Partners using ISDN:
 - ♦ Network Topology (i.e., Ethernet, Token Ring,...)
 - ♦ Router Type
 - ♦ Router Login ID
 - ♦ TCP/IP Address of Host and Router

Step 4 - Establish EDI Environment

To establish EDI Telecommunications Environment using ISDN:

- ◆ Host Login ID
- ◆ Host Password
- ◆ Router Remote Phone Number
- ◆ Router SPID Numbers

Step 4 - Establish EDI Environment

To establish EDI Telecommunications Environment using VANs:

- ♦ The following information is required of Trading Partners using VANs:
 - ♦ Name of VAN Service
 - ♦ VAN Service Contact information

Step 4 - Establish EDI Environment

To establish EDI Telecommunications Environment using BBS:

- ♦ The following information is required of Trading Partners using BBS:
 - ♦ Modem Protocol (i.e., Z modem, X modem)
 - ♦ Modem Baud Rate
 - ♦ Issuer Number

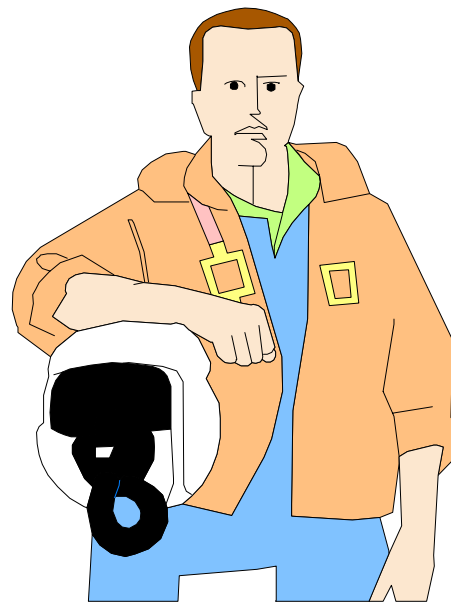
Step 4 - Establish EDI Environment

- ♦ Develop Application Interface
- ♦ Unit Test

EDI Process

Step 5

Test EDI
System



Step 5 - Test EDI System

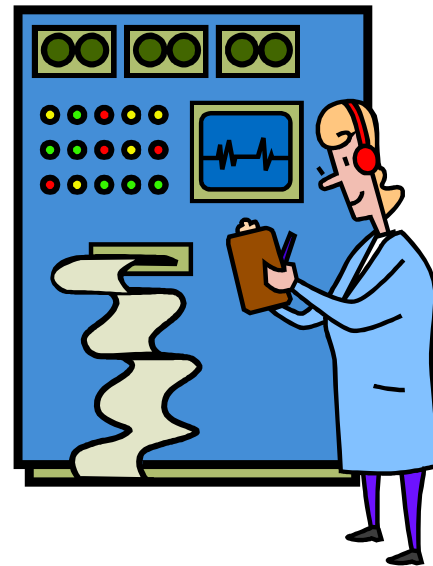
Testing Requirements

- ♦ Three “clean” test submissions with the following contents:
 1. A portion of the trading partner’s portfolio (Original)
 2. Trading partner’s entire portfolio (Re-submission)
 3. Trading partner’s entire portfolio (Corrected and Verified)

Step 5 - Test EDI System

Testing Requirements

- ♦ Two of the three “clean” tests must occur in succession
- ♦ Each submission must include comparison file
 - ♦ Same data set being transferred via EDI using current non-EDI method



Step 5 - Test EDI System

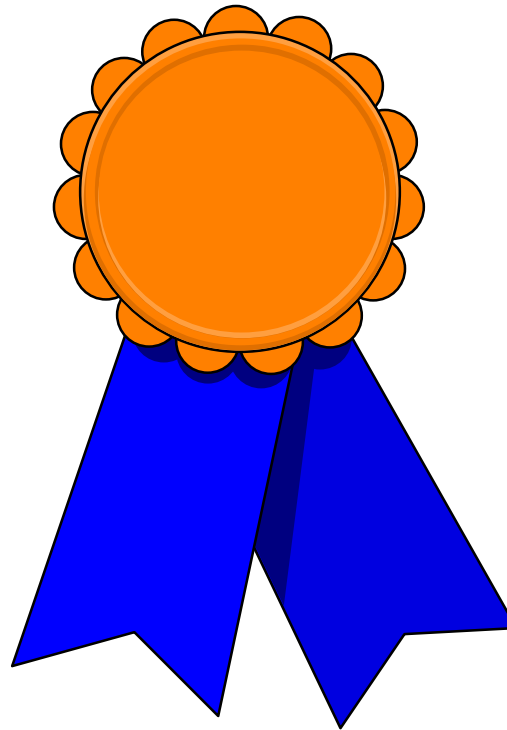
Testing Expectations

- ♦ Data received at ACS GSG will be tested to verify accuracy
- ♦ Transaction set 997 (Functional Acknowledgement) will be sent to trading partner
- ♦ Status report with each submission provided by ACS GSG

EDI Process

Step 6

Move into
Production



Step 6 - Move to Production

- ◆ Once testing is completed successfully, trading partner moves to production



Program Contacts

- ♦ Ginnie Mae Web Page
 - ♦ www.ginniemae.gov
- ♦ Ginnie Mae EDI Hotline
 - ♦ 1-800-GINNIE4 (Option 1)
- ♦ Stewart Spettel, Quarterly Reporting Manager
- ♦ Richard Parker, EDI Task Leader
- ♦ Monique Squalls, EDI Coordinator

Ginnie Mae EDI Workshops

Conclusion

Thank You